




University Faculty Details

Title	Dr.	First Name	Vibha	Last Name	Gaur	
Designation		Professor				
Department		Department of Computer Science				
Address (Campus)		Acharya Narender Dev College, University of Delhi, Govindpuri, Kalka Ji-110019				
Phone No (Campus)		011-26294542				
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Web-Page		http://andcollege.du.ac.in/faculty_details.html				
Educational Qualification						
Degree		Institution		Year		
Ph.D.		University of Delhi, Delhi		2008		
M.C.A.		G. N. D. University, Amritsar		1997		
Research Interests / Specialization						
Requirement Engineering, Quality Requirements, Users' Trust, Software Development Models, Intuitionistic Fuzzy Logic, Fuzzy Cognitive Maps, Multi-agent Systems, e-commerce etc.						
Research Guidance: Supervision of awarded Doctoral Thesis						
1. Anuja. 2014. Requirement Engineering Process for Multi-Agent Systems, University of Delhi						
2. Neeraj Kumar Sharma. 2014. Agent-Mediated Attack-Resilient Reputation System For e-Commerce, University of Delhi						
Teaching Experience (Subjects/Courses Taught): 26 Years						
Courses taught includes M.Sc. (CS), B. Tech. (CS), B.Sc. (H) CS, B.Sc. Physical Sciences with Computer Science						
Honors & Awards						
Best Paper Award for the paper titled "Exploring the Interdependencies among Communication, Knowledgeability and performance of Multi-agent Systems" at The World Congress on Engineering [WCE 2007], July2-4, 2007, London, U.K.						
Publication Profile						
<i>List of Publications in Journals</i>						
1. Sharma A, Sharma P, Bamotra H, Gaur V. An extended approach to appraise electricity distribution and carbon footprint of bitcoin in a smart city. Front Big Data. 2023 Feb 2; 6:1082113. doi: 10.3389/fdata.2023.1082113. PMID: 36818822; PMCID: PMC9932593.						
2. Dr. Sarabjeet Kaur Kochhar, Anuja Soni, Prof. Sangeeta Srivastava and Prof. Vibha Gaur (2022) "A Simulation-based Approach to Evaluate and Regulate the Reputation Score of a Software Agent in E-Market", International Journal of Next-Generation Computing, 13(3). doi: 10.47164/ijngc.v13i3.788, October 2022.						
3. Srivastava, S., Varshney, Anuja Soni, 2022, Vibha Gaur, An Automated Transformation From Requirement To Design Model For Web Applications, Webology, ISSN: 1735-188X), Volume 19, Number 2, pp. 4925-4941.						
4. Varshney, A., Kapoor, Y., Chawla, V. and Gaur, V., 2022. A novel framework for assessing the criticality of retrieved information. International Journal of Computing and Digital System, Vol. 11, no. 1, pp. 1229-1244, ISSN (2210-142X)						
5. Thukral, Tishya & Varshney, Ashwani & Gaur, Vibha. (2021). Intensity quantification of public opinion and emotion analysis on climate change. International Journal of Advanced Technology and Engineering Exploration. ISSN (Print):						

2394-5443 ISSN (Online): 2394-7454 Vol. 8(83). DOI: 10.19101/IJATEE.2021.874417, pp. 1351-1366.

6. Srivastava, S., Varshney, A., Katyal, S., Kaur, R., & Gaur, V., 2021. A smart learning assistance tool for inclusive education. *Journal of Intelligent & Fuzzy Systems*, Vol. 40 No. 6, pp. 11981-11994, ISSN 1064-1246.
7. Ankit Pant, Anuj Gupta, Ashutosh Gupta, Vijay Giri, Vibha Gaur, Ravneet Kaur, (2016) Low Cost Navigation System for the Visually Impaired, *Advances in Computer Science and Information Technology (ACSIT)*, 3(5):422-425 ISSN:(2393-9915); Print ISSN(2393-9907)
8. Anuja Soni, Vibha Gaur, (2016) Specifying Uncertainties in Inter-Agent Dependencies using Rough Sets and Decision Table, *International Journal of Computer Science Engineering and Technology (IJCSET)*, Vol 6, Issue 1, 1-8, ISSN: 2231-0711
9. Anuja Soni, Vibha Gaur, (2015) A novel approach to streamline RE process for multi-agent systems, *Int. J. Software Engineering, Technology and Applications*, Vol. 1, Nos. 2/3/4, 2015, pp. 190-211
10. Neeraj Kumar Sharma, Vibha Gaur & Punam Bedi (2014) Improving Trustworthiness in E-Market Using Attack Resilient Reputation Modeling, *International Journal of Intelligent Information Technologies*, 10(3), ISSN: 1548-3657, pp. 57-82.
11. Vibha Gaur, Anuja Soni. (2014) A Knowledge-Driven Approach for Specifying the Requirements of Multi-Agent System, Special Issue on: "Requirement Engineering Processes in Information Systems", *International Journal of Business Information Systems*, Inderscience, ACM digital library, DBLP, In Press, ISSN: 1746-0980.
12. Vibha Gaur, Anuja Soni, Punam Bedi, S.K. Muttoo. (2014). Comparative Analysis of ANFIS and ANN for Evaluating Inter-Agent Dependency Requirements, *International Journal of Computer Information Systems and Industrial Management Applications*, MIR Labs, Volume 6, 2014, ISSN: 2150-7988, pp. 23 - 34.
13. Neeraj Kumar Sharma, Vibha Gaur & Punam Bedi (2013). A Dynamic Personalised Product pricing Strategy using Multiple Attributes in Agent mediated e-market - A Neural Approach. *International Journal of Information and Decision Sciences (IJIDS)*, Vol.6, No.1, pp. 46 - 69, ISSN: 1756-7025.
14. Vibha Gaur, Anuja Soni (2013). A Fuzzy Traceability Vector Model for Requirements Validation, *International Journal of Computer Applications in Technology (IJCAT)*, Special Issue on: Advanced Software Engineering and Its Applications, Inderscience, ACM digital library, DBLP, 2013 47(2/3):172-188, ISSN online: 1741-5047.
15. Vibha Gaur, Anuja Soni, (2012) Analytical Inference Model for Prediction and Customization of Inter-Agent Dependency Requirements, *ACM SIGSOFT Software Engineering Notes*,37(2), 1-11, USA: ACM Digital Library, DBLP, ISSN: 0163-5948.
16. Neeraj Kumar Sharma, Vibha Gaur & S. K Muttoo (2012). A Dynamic Reputation System with Built-in Attack Resilience to Safeguard Buyers in e-market. *ACM SIGSOFT, Software Engineering Notes*, 37(4): 1-19, ISSN: 0163-5948.
17. Vibha Gaur, Neeraj Kumar Sharma, Punam Bedi (2011). A Dynamic Model for Sharing Reputation of Sellers among Buyers for Enhancing Trust in Agent Mediated e-market. *International Journal of Computer Science Issues* 8(6), 1-10, ISSN: 1694-0814.
18. Vibha Gaur, Neeraj Kumar Sharma (2011). A Dynamic Framework of Reputation Systems for an Agent Mediated e-market. *International Journal of Computer Science Issues* 8(4): 77-89, ISSN:1694-0814.
19. Vibha Gaur, Neeraj Kumar Sharma, Punam Bedi (2011). A Dynamic Reinforcement Learning Strategy for Seller Agents in e-market. *International Journal on Recent Trends in Engineering & Technology*, 5(1): 25-31, ISSN:2278-0181.
20. Vibha Gaur, Anuja Soni (2010) An Integrated Approach to Prioritize Requirements using Fuzzy Decision Making, *IACSIT International Journal of Engineering and Technology*, 2(4): 320-328, ISSN: 1793-8236.
21. Vibha Gaur, Anuja Soni (2012) A Novel Approach to Explore Inter Agent Dependencies from User Requirements, *INSODE, First World Conference on Innovation and Computer Sciences*, Antalya/Turkey, Science Direct, *Journal of Procedia Technology*, Vol. I, pp. 412-419, Elsevier, ISSN: 2212-0173.
22. Punam Bedi, Vibha Gaur (2008). Trust Based Prioritization of Quality Attributes, *International Arab Journal of Information Technology Journal*, Jordan, 5(3):223-229 (impact factor 0.065, SJR (2011) 0.027 SNIP (2011) 0.338). .
23. Punam Bedi, Vibha Gaur (2007). Establishing Quality Requirements of Multi-Agent Projects, *Information Technology Journal*, Asian Network for Scientific Information, , 6(5):490-496 (SJR(2011) 0.038 SNIP(2011) 1.129).
24. Vibha Gaur, Punam Bedi (2007) Evaluating Trust in Agent-Mediated E-Commerce, *International Journal of Technology*,

Knowledge and Society, Common Ground Publisher, Australia, 3(3): 65-74.

25. Punam Bedi, Vibha Gaur, (2007) Trust Based Quantification of Quality for Multi-agent Systems, Information Technology Journal, Asian Network for Scientific Information, 6(3):414-423(SJR (2011) 0.038 SNIP(2011) 1.129).

List of Publications in Conferences

1. Panda, A., Varshney, A., & Gaur, V. (2021, September). Forecasting temperature anomalies of planet Earth: A Comparative Analysis of AI Models. In 2021 9th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO) (pp. 1-6). IEEE.
2. Anuja Soni, Vibha Gaur, (2016) A Methodological Approach to Identify Type of Dependency from User Requirements, 16th International Conference, Beijing, China, July 4-7, 2016, Proceedings, Part IV, ICCSA 2016, Lecture Notes in Computer Science, pp 374-391 Print ISBN 978-3-319-42088-2, Online ISBN978-3-319-42089-9.
3. Pankaj Khanna, Neeti Misra, Vibha Gaur, Rahul Dwivedi, Manish Kumar Singh, Sagar Patwal, Sachin Kumar, Shivam Agarwal, Parag Jain, Gaurav Prakash, Kunaal Madaan, Palak Sharma, Shivani Goyal, (2016) An Innovative Undergraduate Virtual Chemistry Laboratory: Design and Learning Outcomes, 19th CRSI National Symposium in Chemistry, held at University of North Bengal, Siliguri, Darjeeling, West Bengal (14th-16th July 2016), CRSI NSC19, pp168.
4. Palak Sharma, Shivani Goyal, Rahul Dwivedi, Manish Kumar Singh, Sagar Patwal, Sachin Kumar, Shivam Agarwal, Parag Jain, Gaurav Prakash, Kunaal Madaan, Pankaj Khanna, Neeti Misra, Vibha Gaur, (2016) Virtual Chemistry Laboratory: A novel approach to minimize lab pollution, National Conference on combating industrial pollution for sustainable environment-A fusion of industrial and scientific efforts, held at Gargi College, University of Delhi, Delhi (22nd-23rd September 2016), CIPSE-2016, pp74.
5. Parag Jain, Sagar Patwal, Rahul Dwivedi, Manish Kumar Singh, Sachin Kumar, Shivam Agarwal, Palak Sharma, Shivani Goyal, Neeti Misra, Vibha Gaur, Pankaj Khanna, (2016) An Innovative Step Towards Blended Learning: Virtual Laboratory, Innovation Conclave-2016, Nurturing Research at UG level, held at Acharya Narendra Dev College, University of Delhi, Delhi (25th-26th September 2016),pp 44.
6. Neeraj Kumar Sharma, Vibha Gaur,& Punam Bedi (2013). Distributed Multi-agent Reputation Framework for Interactions in e-market. IEEE International Conference on Fuzzy Systems 2013 (FUZZ-IEEE, 2013) (pp. 1-8). Hyderabad, India: IEEE.
7. Vibha Gaur, Anuja Soni, S.K.Muttoo, Neeraj Jain, (2012) Comparative Analysis of Mamdani and Sugeno Inference Systems for Evaluating Inter-Agent Dependency Requirements, 12th International Conference on Hybrid Intelligent Systems, Pune India, pp. 131-136, IEEE Explore, DBLP.
8. Vibha Gaur, Anuja Soni, (2011). Identifying an Appropriate Requirements Prioritization Methodology using Fuzzy Decision-Making, Fifth International Conference on Information Processing -2011, CCIS Series 157, pp. 258-268, , Springer Verlag.
9. Vibha Gaur, Anuja Soni (2011) Evaluating Degree of Dependency from Domain Knowledge using Fuzzy Inference System, First International Conference on Computer Science, Engineering and Information Technology, Springer, CCIS Series, 204, pp. 101-111, CCSEIT-2011.
10. Vibha Gaur, Neeraj Kumar Sharma (2011). A Dynamic Seller Selection Model for Agent Mediated e-market. In International Conference on Advances in Computing and Communication, Part II, CCIS 191 ,pp. 284-29, Kochi, India: Springer Berlin Heidelberg
11. Vibha Gaur, Anuja Soni and Punam Bedi. (2010) An Agent-Oriented Approach to Requirements Engineering, In proceedings of IEEE 2nd International Advance Computing Conference, February 19-20, 2010, India, 449-454. USA: IEEE Press and IEEE Xplore.
12. Vibha Gaur, Anuja Soni and Punam Bedi. (2010) An Application of Multi-Person Decision-Making Model for Negotiating and Prioritizing Requirements in Agent-Oriented Paradigm, In proceedings DSDE'10 - International Conference on Data Storage and Data Engineering, February 9-10,2010, Bangalore, India, 164-168. USA: IEEE Press and IEEE Xplore, ACM digital library, DBLP.
13. Vibha Gaur, Neeraj Kumar., Sharma, & Punam Bedi (2010). Evaluating Reputation Systems for Agent Mediated e-Commerce. International Conference on Advances in Computer Science (ACS 2010) (pp. 220-224). Kerala, India: Engineers Network, Conference Publishing System (CPS) ACEEE.

14. Punam Bedi, Vibha Gaur. (2007) Optimal Partner Selection Model for Cooperation, Proc. IICAI'07 - 3rd Indian International Conference on Artificial Intelligence, Pune, India, pp. 1297-1307, 2007.
15. Punam Bedi, Vibha Gaur, (2007) Quantification of Quality for Multi-agent System: A Clustering Approach, Proc. CISTM'07 - 5th Annual Conference on Information Science Technology and Management, Hyderabad, India, pp. 72-1: 72-13.
16. Punam Bedi, Vibha Gaur (2007) Refining Quality Requirements in Agent-Mediated E-Commerce from User's Trust, IEEE ACVIT'07 - International Conference on Advances in Computer Vision and Information Technology, Aurangabad, pp. 590-597.
17. Punam Bedi, Vibha Gaur (2007) Prioritizing Quality Specifications of Multi-agent Systems, Proc. WCE'07 - the 2007 International Conference of Information Engineering, World Congress on Engineering, London, U.K., Vol. 1, pp. 541-546.
18. Punam Bedi, Vibha Gaur (2007) Evaluating Trust in Agent-Mediated E-Commerce, Presented in Third International Conference on Technology, Knowledge and Society, Cambridge, U.K., January 9-12.
19. Punam Bedi, Vibha Gaur (2006) Multi Dimension Quality Model of MAS, Proc. SERP'06 – International Conference on Software Engineering Research and Practice, Las Vegas, Nevada, USA, Volume 1, CSREA Press 2006, pp130-136.

Professional Societies Memberships

- Member of IAENG (International Association of Engineers) Society of Software Engineering.
- Member, Editorial Review Board, Journal of Information, Information Technology and Organizations.
- Member, Editorial Review Board, Information Technology Journal.
- Associate Editor of International Journal of Technology, Knowledge and Society, Vol. 3, 2007.

Administrative Assignment

- Core Committee member for the development of curricula of BSc (H) computer Science, Multidisciplinary courses of study for three core disciplines, and Discipline specific electives under Undergraduate Curriculum Framework-2022 at Department of Computer Science, University of Delhi.
 - Working Group Member, Under-Graduate Curriculum Revision Committee - 2019 University of Delhi for the revision of the Course titled Operating System Course Code BHCS06 and the course titled Software Engineering Course Code BHCS11 in Programme (CBCS) B.SC.(HONS.) COMPUTER SCIENCE;
 - Member, Curriculum Development for FYUP B.Tech. Computer Science (2013) for CSHT 410 Titled - Software Engineering.
 - Teacher In charge. B.SC.(HONS.) COMPUTER SCIENCE (2016 -18), B.SC. Programme (CS) (2008 - 10)
 - Member, Admission Committee (2016 - 2020, 2008 - 10)
 - Member, Finance Committee (2023 - 24)
 - Member, Debating Society (2022 -24)
 - Member, Committee for Mentorship and Counselling (2018 - 20)
 - Member, Time Table/ Workload Committee (2016 -18, 2008 - 10)
 - Member, Debating Society (2010 - 12)
 - Member, Professional Development and Faculty Enrichment Committee (2010 - 12)
 - Convener, Departmental Purchase Committee (2016 - 18)
 - Member, Moderation Committee (2016, 2008 - 09)
 - Convener, IT Committee (2018 - 20, 2008 – 10)
- *Under her convenorship, the College for the first time took charge of self - maintenance of its website using DRUPAL.

Organized/Participation in Workshops/Conferences

1. Organized a 5 days Online workshop on **A First Step towards Developing Virtual Lab using MERN Stack System** for faculty and students of Acharya Narendra Dev College, University of Delhi, Delhi (October 9 - 24, 2021).
2. Organized a 2 - day workshop on **DRUPAL: A Content Management System** for faculty and students at Acharya Narendra Dev College, University of Delhi, Delhi (February 1 - 2, 2010).
3. Participated in a 3 - day workshop Wikied 2008 on **Open Educational Resources** that was held at Acharya Narendra Dev College, University of Delhi, Delhi (3rd, 4th and 6th October 2008).

4. Participated in a 2 - day Orientation Programme on **Restructuring Higher Education** sponsored by Kerala State Higher
5. Education at University of Calicut, Calicut (17th and 18th July 2008).
6. Attended a 15th IEEE International Conference on **Requirement Engineering**, India Habitat Centre, New Delhi (15 - 19th October 2007)

Summer Institutes, refresher or orientation courses attended

Refresher Courses:

- i) Computer Application from CPDHE, University of Delhi, Delhi held from 10th September to 30th September 2008.
- ii) Computer Application from UGC Academic Staff College, University of Calicut held from 1st July 2008 to 21st July 2008.
- iii) Computer Science from CPDHE, University of Delhi, Delhi held from 22nd September to 14th October 2005.

Entrepreneurship Programme:

Faculty Entrepreneurship Development Programme conducted by National Foundation of Indian Engineers (NAFEN) from 22nd December, 2008 to 6th January, 2009.

Research/ Academic Projects

1. Name of the Project: CASE Tool Box

Position in the Project: Mentor

Duration: 2010 - 11

Research Agency: Department of Science and Technology

Grant: Rs. 1,00,000/-

2. Name of the Project: Sensors Based Notification and Navigation System for the Visually Handicapped

Position in the Project: Co-Mentor

Duration: 2013 - 14

Research Agency: Department of Science and Technology

Grant: Rs. 82,000/-

3. Name of the Project: Multipurpose Quad-copter

Position in the Project: Co-Mentor

Duration: 2014 - 15

Research Agency: Department of Science and Technology

Grant: Rs. 1,00,000/-

4. Name of the Project: Designing a Virtual Chemistry Lab for Undergraduate Students

Position in the Project: Principal Co-Investigator

Duration: 2015 - 16

Research Agency: University of Delhi

Grant: Rs. 6,00,000/-

Other Projects

5. Name of the Project: Innovation and Entrepreneurship Development Centre (IEDC)

Duration: July 1, 2010 - June 30, 2015

Research Agency: Department of Science and Technology

Grant: Rs. 4,55,000/- (Non-recurring)

Dr. Vibha Gaur has been the Coordinator, Innovation and Entrepreneurship Development Centre (IEDC) supported by National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology (DST), Government of India since February 13, 2009. To strengthen the entrepreneurial culture amongst students, she has organized 13 Entrepreneurship Awareness Programs (EAC) of three day's duration within and outside the college. She has also conducted 3 Entrepreneurship Development Programmes (EDPs) meant for the general public typically of 4 – 6 weeks duration to generate a culture of innovation and conducive entrepreneurial ecosystem amongst students and society. IEDC under her leadership

initiated 26 Students' Innovative Projects to convert innovative ideas of students into the marketable products. She herself mentored several Students' Innovative Projects and has implemented the same.